

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2023-03-30 07:42:34  
Date of Next Testing: 2026-03-29 07:42:34  
Product Name: **(R)-(+)- $\alpha$ -Lipoic acid**  
CAS Number: 1200-22-2  
Specifications & Purity: 98%  
Lot #: C2324762  
SKU #: **D118666**  
**Analysis: 174385**  
Storage Temperature: Store at -20°C, Argon charged

Parameter	Limit Values	Result
Purity(HPLC)	98-100 (%)	99.70100%
Specific Rotation [a] <sub>D</sub> 20/D(c=1 in EtOH)	110-129 (°)	116.53°
Melting point	47-51 (°C)	50.99000 °C
Appearance (D118666)	White to Yellow Crystals to Powder and/or Chunks	White to Yellow Crystals to Powder and/or Chunks
Proton NMR spectrum	Conforms to Structure	Conforms to Structure
Infrared spectrum	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager